

Clean Version of Pending Claims After Amendment:

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1. ~~(Amended)~~ A bus system, comprising:
 - a first dynamically configurable bus;
 - a first bus device on the first bus having a first virtual address and a first physical address;
 - a second bus device on the first bus having a second virtual address and a second physical address; and
 - a map of the first and second virtual addresses to the first and second physical addresses, respectively, the map to be accessible over the first bus and to be distributed across a plurality of bus devices on the first bus.
 2. The bus system of claim 1, wherein at least one of the first and second virtual addresses is a guaranteed unique identifier.
 3. (Twice Amended) The bus system of claim 12, wherein a portion of the map is stored on the bridge.
 4. The bus system of claim 1, wherein at least one of the first and second bus devices is a bus manager.
 5. (Twice Amended) The bus system of claim 4, wherein the bus manager is one of a workstation and a personal computer.

6. (Amended) The bus system of claim 4, wherein a portion of the map is stored on the bus manager.
7. The bus system of claim 1, wherein the bus system implements a network.
8. (Twice Amended) The bus system of claim 1, wherein at least one of the first and second bus devices is one of a printer, a plotter, a workstation, a personal computer, a video camera, and a magnetic tape drive.
9. (Twice Amended) The bus system of claim 1, wherein the map is encoded as one of an array, a doubly linked list, a tree, a table, and a file.
10. The bus system of claim 1, wherein the map is bi-directional.
11. (Amended) The bus system of claim 1, further comprising a second dynamically configurable bus.
12. The bus system of claim 11, wherein the first and second buses are coupled by a bridge.
13. (Twice Amended) A bus system, comprising:
a first dynamically configurable bus;

~~a plurality of bus devices coupled to the first bus, each of the plurality of bus devices having a virtual address and a physical address; and~~

~~a map of the virtual addresses of the bus devices to the physical addresses of the bus devices, said map to be accessible over the first bus and to be distributed across the plurality of bus devices.~~

14. The bus system of claim 13, wherein at least one virtual address is a guaranteed unique identifier.

15. (Twice Amended) The bus system of claim 23, wherein the map is to be reconstructed for bus devices on the first and second buses after detection of a configuration event on one of the first and second buses.

16. The bus system of claim 13, wherein at least one of the bus devices is a bus manager.

17. (Twice Amended) The bus system of claim 16, wherein the bus manager is one of a workstation and a personal computer.

18. (Twice Amended) The bus system of claim 16, wherein a portion of the map is stored on the bus manager.

19. The bus system of claim 13, wherein the bus system implements a network.

20. (Twice Amended) The bus system of claim 13, wherein at least one of the bus devices is one of a printer, a plotter, a workstation, a personal computer, a video camera, and a magnetic tape drive.

21. (Twice Amended) The bus system of claim 13, wherein the map is encoded as one of an array, a doubly linked list, a tree, a table, and a file.

22. (Twice Amended) The bus system of claim 13, wherein the map is bi-directional.

23. (Amended) The bus system of claim 13, further comprising a second dynamically configurable bus.

24. The bus system of claim 23, wherein the first and second buses are coupled by a bridge.

25. (Twice Amended) The bus system of claim 24, wherein a portion of the map is stored on the bridge.

26. (Twice Amended) The bus system of claim 23, wherein the map is to be reconstructed for bus devices on one of the first and second buses after experiencing a configuration event.

27. (Twice Amended) A method comprising:

~~querying a first bus device and a second bus device other than a bus manager on a
dynamically configurable bus system;
identifying the queried device from its configuration information;
ascertaining a virtual address and a physical address for the identified device;
constructing a map of the virtual address of the first and the second bus device to the
physical address of the first and the second bus device, respectively; and
storing the map, said map to be accessible over the bus system and to be distributed
across a plurality of bus devices on the bus system.~~

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28. (Amended) The method of claim 27, wherein the constructing the map includes encoding the map as one of an array, a doubly linked list, a tree, a table, and a file.

29. (Twice Amended) The method of claim 27, wherein the dynamically configurable bus system includes a first dynamically configurable bus and a second dynamically configurable bus and the querying is performed for bus devices on one of the first and second dynamically configurable buses experiencing a configuration event.

30. (Twice Amended) The method of claim 27, wherein the constructing the map includes constructing a bi-directional map.

31. (Twice Amended) The method of claim 27, wherein the constructing the map includes at least one mapped virtual address that is a guaranteed unique identifier.

32. (Amended) The method of claim 27, wherein the storing the map includes storing a portion of the map on the bus manager.

33. (Twice Amended) A method comprising:

querying a plurality of bus devices other than a bus manager on a dynamically configurable bus system;

identifying the queried device from its configuration information;

ascertaining a virtual address and a physical address for the identified device;

constructing a map of the virtual address for each of the plurality of bus devices to the physical address for each of the plurality of bus devices; and

storing the map, said map to be accessible over the bus system and to be distributed across the plurality of bus devices on the bus system.

34. (Twice Amended) The method of claim 33, wherein the querying the plurality of bus devices includes querying at least one of a printer, a plotter, a workstation, a personal computer, a video camera, and a magnetic tape drive.

35. (Twice Amended) The method of claim 33, wherein the bus manager comprises one of a workstation and a personal computer.

36. (Twice Amended) The method of claim 33, wherein the storing the map includes storing a portion of the map on the bus manager.

37. (Twice Amended) The method of claim 33, wherein the constructing the map includes encoding the map as one of an array, a doubly linked list, a tree, a table, and a file.

38. (Twice Amended) The method of claim 33, wherein the constructing the map includes constructing a bi-directional map.

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39. (Twice Amended) The method of claim 33, wherein the dynamically configurable bus system includes a first dynamically configurable bus and a second dynamically configurable bus and the querying is performed for bus devices on one of a first and second dynamically configurable bus experiencing a configuration event.

40. (Twice Amended) A machine-readable medium that provides instructions, which when executed by a machine, cause said machine to perform operations comprising:

- querying a plurality of bus devices other than a bus manager on a dynamically configurable bus system;
- identifying the queried device from its configuration information;
- ascertaining a virtual address and a physical address for the identified device;
- constructing a map of the virtual address for each of the plurality of bus devices to the physical address for each of the plurality of bus devices; and
- storing a map, said map to be accessible over the bus system and to be distributed across the plurality of bus devices on the bus system.

41. (Twice Amended) The machine-readable medium of claim 40, wherein the querying the plurality of bus devices includes querying at least one of a printer, a plotter, a workstation, a personal computer, a video camera, and a magnetic tape drive.

42. (Twice Amended) The machine-readable medium of claim 40, wherein the bus manager is one of a workstation and a personal computer.

43. (Twice Amended) The machine-readable medium of claim 40, wherein the storing the map includes storing a portion of the map on the bus manager.

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44. (Twice Amended) The machine-readable medium of claim 40, wherein the constructing the map includes encoding the map as one of an array, a doubly linked list, a tree, a table, and a file.

45. (Twice Amended) The machine-readable medium of claim 40, wherein the constructing the map includes constructing a bi-directional map.

46. (Twice Amended) The machine-readable medium of claim 40, wherein the dynamically configurable bus system includes a first dynamically configurable bus and a second dynamically configurable bus and the querying is performed for bus devices on one of a first and second dynamically configurable bus experiencing a configuration event.